IN THE CLAIMS:

1. (Previously Presented) A method, comprising:

activating, by using a packet based data transmission protocol context, a communication connection based on a communication protocol of a first type from a user equipment to a network support node of a communication network;

allocating, by the network support node, a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

allocating, by the network support node, and based on a transition mechanism used by the communication network, a second connection information part comprising a second address related to the communication protocol of a second type to the communication connection of the user equipment;

storing, by the network support node, the first connection information part and the second connection information part in a register, wherein the second connection information part is associated with the first connection information part in a common entry in the register;

tunneling, with the network service node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the user equipment and the another node using a connection based on the communication protocol of the second type; and

executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.

2. (Previously Presented) The method according to claim 1, wherein, in the activating of the communication connection, an activation request received from the user equipment at the network support node, the activation request comprising at least one of an indication for a dynamic addressing and an indication of an address type for the communication protocol of the first type.

3. (Previously Presented) The method according to claim 1, wherein, in the allocating of the first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment, the first address related to the communication protocol of the first type is allocated by the network support node.

4. (Previously Presented) The method according to claim 1, wherein, in the allocating of the first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment, the first address related to the communication protocol of the first type is requested from an external address allocation element contacted by the network support node.

5. (Previously Presented) The method according to claim 1, wherein, in the allocating of the second connection information part comprising a second address related to the communication protocol of the second type to the communication connection of the first node, the second address related to the communication protocol of the second type is allocated by the network support node from an internal pool of addresses.

6. (Previously Presented) The method according to claim 1, wherein, in the allocating of the second connection information part comprising a second address related to the communication protocol of the second type to the communication connection of the first node, the second address related to the communication protocol of the second type is requested from an external address allocation element contacted by the network support node.

7. (Previously Presented) The method according to claim 1, wherein, in the storing, the network support node stores the first connection information part and the second connection information part associated with each other by an entry in a table portion related to the communication connection of the user equipment, wherein the second connection information part is stored in a specific table field of the table portion.

8. (Cancelled)

9. (Previously Presented) The method according to claim 1, wherein, in the activating the communication protocol of the first type comprises one type of an internet protocol, in particular an IPv6 based protocol, and the communication protocol of the second type comprises another type of an internet protocol, in particular an IPv4 based protocol.

10. (Cancelled)

11. (Previously Presented) The method according to claim 1, wherein, in the allocating, based on the transition mechanism, the transition mechanism used by the communication network comprises an automatic tunneling mechanism which uses, in particular, the intra-site automatic tunnel addressing protocol.

12. (Cancelled)

13. (Previously Presented) A system, comprising:

an activator configured to activate, by using a packet based data transmission protocol context, a communication connection based on a communication protocol of a first type between a user equipment and a network support node of a communication network;

a first allocator configured to allocate, in the network support node, a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

a second allocator configured to allocate, in the network support node and on the basis of a transition mechanism used by the communication network, a second connection information part comprising a second address related to a communication protocol of a second type to the communication connection of the user equipment;

an associator configured to associate, by the network support node, the second connection information part with the first connection information part, and store, by the network support node, the associated first and second connection information parts in a register;

a tunneler configured to tunnel, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first type

between the user equipment and another node using a connection based on the communication protocol of the second type; and

an executor configured to execute encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.

14-24. (Cancelled)

25. (Previously Presented) An apparatus, comprising:

a network support node, the network support node comprising

an activator configured to activate, by using a packet based data transmission protocol context, a communication connection based on a communication protocol of a first type between a user equipment and the network support node;

a first allocator configured to allocate a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

a second allocator configured to allocate, on the basis of a transition mechanism used by a communication network, a second connection information part comprising a second address related to a communication protocol of a second type to the communication connection of the user equipment;

an associator configured to associate the second connection information part with the first connection information part, and store the associated first and second connection information parts in a register;

a tunneler configured to tunnel, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the user equipment and another node using a connection based on the communication protocol of the second type; and

an executor configured to execute encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.

26. (Previously Presented) The apparatus according to claim 25, wherein the activator of the network support node is configured to activate the communication connection and to receive an activation request from the user equipment, the activation request comprising at least one of an indication for a dynamic addressing and an indication of an address type for the communication protocol of the first type.

27. (Previously Presented) The apparatus according to claim 25, wherein the first allocator of the network support node is configured to allocate the first connection information part and to comprise first addresses related to the communication protocol of the first type and to allocate a selected one of the first addresses.

28. (Previously Presented) The apparatus according to claim 25, wherein the first allocator of the network support node is configured to allocate the first connection information part and to request an address for the first address related to the communication protocol of the first type from an external address allocation element.

29. (Previously Presented) The apparatus according to claim 25, wherein the second allocator of the network support node is configured to allocate the second connection information part and to comprise a pool of second addresses related to the communication protocol of the second type and to allocate a selected one of the second addresses.

30. (Previously Presented) The apparatus according to claim 25, wherein the second allocator of the network support node is configured to allocate the second connection information part and to request an address for the second address related to the communication protocol of the second type from an external address allocation element.

31. (Previously Presented) The apparatus according to claim 25, wherein the associator of the network support node is configured to store the associated first and second connection information parts in a register of the network element by updating an entry in a table portion related to the communication connection of the user equipment, wherein the second connection information part is stored in a specific table field of the table portion.

32. (Cancelled)

33. (Previously Presented) The apparatus according to claim 25, wherein the communication protocol of the first type comprises one type of an internet protocol, in particular an IPv6 based protocol, and the communication protocol of the second type comprises another type of an internet protocol, in particular an IPv4 based protocol.

34. (Cancelled)

35. (Previously Presented) The apparatus according to claim 25, wherein the transition mechanism used by the communication network comprises an automatic tunneling mechanism which uses in particular the intra-site automatic tunnel addressing protocol.

36-37. (Cancelled)

38. (Previously Presented) An apparatus, comprising:

activating means for activating by using a packet data protocol context a communication connection based on a communication protocol of a first type between a user equipment and the apparatus;

first allocating means for allocating a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

second allocating means for allocating, on the basis of a transition mechanism used by the communication network, a second connection information part comprising a second address related to a communication protocol of a second type to the communication connection of the user equipment;

associating means for associating the second connection information part with the

first connection information part, and storing the associated first and second connection information;

tunneling means for tunneling, with the apparatus being a tunnel end-point, the data transmission based on the communication protocol of the first type between the user equipment and another node using a connection based on the communication protocol of the second type; and

executing means for executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the apparatus transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.

39. (Previously Presented) The method according to claim 1, wherein the packet based data transmission protocol context is a packet data protocol context.

40. (Previously Presented) The method according to claim 1, wherein the network support node is a gateway node of a communication network, in particular a gateway general packet radio service support node.

41-42. (Cancelled)

43. (Previously Presented) The apparatus according to claim 25, wherein the packet based data transmission protocol context is a packet data protocol context.

44. (Previously Presented) The apparatus according to claim 25, wherein the network support node is a gateway node of a communication network, in particular a gateway general packet radio service support node.

45. (Previously Presented) An apparatus, comprising:

a network support node, the network support node comprising

activating means for activating, by using a packet based data transmission protocol context, a communication connection based on a communication protocol of a first type between a user equipment and the network support node;

first allocation means for allocating a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

second allocation means for allocating, on the basis of a transition mechanism used by a communication network, a second connection information part comprising a

second address related to a communication protocol of a second type to the communication connection of the user equipment;

associating means for associating the second connection information part with the first connection information part, and store the associated first and second connection information parts in a register;

tunneling means for tunneling, with the network support node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the user equipment and another node using a connection based on the communication protocol of the second type; and

executing means for executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.

46. (Previously Presented) An apparatus, comprising:

an activator configured to activate by using a packet data protocol context a communication connection based on a communication protocol of a first type between a user equipment and the apparatus;

a first allocator configured to allocate a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

a second allocator configured to allocate, on the basis of a transition mechanism used by the communication network, a second connection information part comprising a second address related to a communication protocol of a second type to the communication connection of the user equipment;

an associator configured to associate the second connection information part with the first connection information part, and storing the associated first and second connection information;

a tunneler configured to tunnel, with the apparatus being a tunnel end-point, the data transmission based on the communication protocol of the first type between the user equipment and another node using a connection based on the communication protocol of the second type; and

an executor configured to execute encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the apparatus transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.

47. (Previously Presented) A computer program embodied on a computer-readable medium, said program configured to control a computer to perform a method, the method comprising:

activating, by using a packet based data transmission protocol context, a communication connection based on a communication protocol of a first type from a user equipment to a network support node of a communication network;

allocating, by the network support node, a first connection information part comprising a first address related to the communication protocol of the first type to the communication connection of the user equipment;

allocating, by the network support node, and based on a transition mechanism used by the communication network, a second connection information part comprising a second related to the communication protocol of a second type to the communication connection of the user equipment;

storing, by the network support node, the first connection information part and the second connection information part in a register, wherein the second connection

information part is associated with the first connection information part in a common entry in the register;

tunneling, with the network service node being a tunnel end-point, the data transmission based on the communication protocol of the first type between the user equipment and another node using a connection based on the communication protocol of the second type; and

executing encapsulation/decapsulation for the data transmission based on the communication protocol of the second type by the network support node transparently for the user equipment,

wherein the user equipment is connected to the communication network by the communication protocol of the first type, and

wherein the communication network uses at least in part the communication protocol of the second type for forwarding the data transmission from the user equipment to the another node.